

Lightweight Ballistic Armor for Military Aircraft

Award Information

Agency:
Department of Defense

Branch

Navy
Amount:
\$135,471.00

Award Year:

2005
Program:
SBIR

Phase:

Phase I
Contract:
N68335-05-C-0234

Agency Tracking Number:

N051-023-0997
Solicitation Year:
2005

Solicitation Topic Code:

N05-023
Solicitation Number:
2005.1

Small Business Information
AMERICAN TECHNICAL COATINGS, INC.
19915 Lake Road, Rocky River, OH, 44116
Hubzone Owned:
N

Socially and Economically Disadvantaged:

N
Woman Owned:
N

Duns:

137672155

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Abstract

American Technical Coatings, Inc. (ATC) is in a unique position to assist the Navy in developing a new material for lightweight ballistic armor for military aircraft based on the following: (1)ATC has developed a unique, patented technology called Hotblox that is lighter weight than current ceramic armor materials including: silicon carbide, alumina, and boron carbide; (2)Hotblox can be easily injection or compression molded into complex shapes using ordinary thermoplastic molding equipment. The ease of manufacturing will reduce production cycles and reduce overall costs of armor parts; (3)The strength of green Hotblox may make it possible to use Hotblox in the green state, eliminating costly steps of firing and machining the ceramic pieces; (4)Hotblox has already displayed good potential as an armor material in the green state; (5) The Hotblox technology is compatible with a variety of ceramics. Using this technology, it is possible to mold layers of different ceramics into one piece in one molding step; (6)ATC has a working relationship with major defense contractors. These companies are familiar with Hotblox and support the development of the Hotblox technology for many applications in aerospace and defense.

* information listed above is at the time of submission.